

Human Machine Interface (HMI) GOT

Alarm Display (Introduction)

This training course is intended for those who use the alarm display of the GOT2000 Series HMI for the first time.

This course is intended for those who use the alarm display of the GOT2000 Series HMI for the first time. In this course, we will learn the overview of the alarm display such as the things we can do with the alarm display, and the types of alarm display.

As prerequisites for this course, you should have already completed the following courses or possess the equivalent knowledge in:

- FA Equipment for Beginners (HMIs)
- GOT2000 Basics (GOT Introduction)
- GT Works3 (GT Designer3) Basics (Screen Design Introduction)
- GT Works3 (GT Designer3) Basics (Elementary Screen Design)

The contents of this course are as follows.
We recommend that you start from Chapter 1.

Chapter 1 Overview of the Alarm Display

We will learn the overview of the alarm display such as an explanation of the alarm display and the things we can do with the alarm display.

Chapter 2 Various Alarm Display Types

We will learn various alarm display types.





Chapter 3 Advanced Functions of the Alarm Display

We will learn the advanced functions of the alarm display.

Final Test

Passing grade: 60% or higher.

Following is an explanation of how to use the graphical user interface.

Go to the next page		Go to the next page.
Back to the previous page		Back to the previous page.
Move to the desired page		"Table of Contents" will be displayed, enabling you to navigate to the desired page.
Exit the learning		Exit the learning. Window such as "Contents" screen and the learning will be closed.

Safety precautions

When you learn based on using actual products, please carefully read the safety precautions in the corresponding manuals.

We will learn the overview of the alarm display such as an explanation of the alarm display and the things we can do with the alarm display.

1.1 What is the alarm display?

1.2 Things we can do with the alarm display

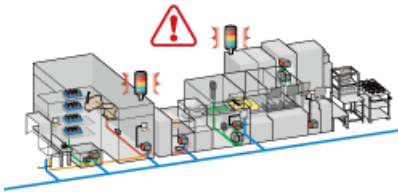
The alarm display is a function that displays the on-site equipment's alarm information, solutions to the currently occurring alarms, and others on the GOT by text.

There are two alarm display function types: one is a function that displays user-configured alarms, and the other is a function that displays system alarms.

The user-configured alarms are called the user alarm and the system alarms are called the system alarm.

Alarms are displayed with comments or in other ways on the GOT.
Alarms can be visualized.

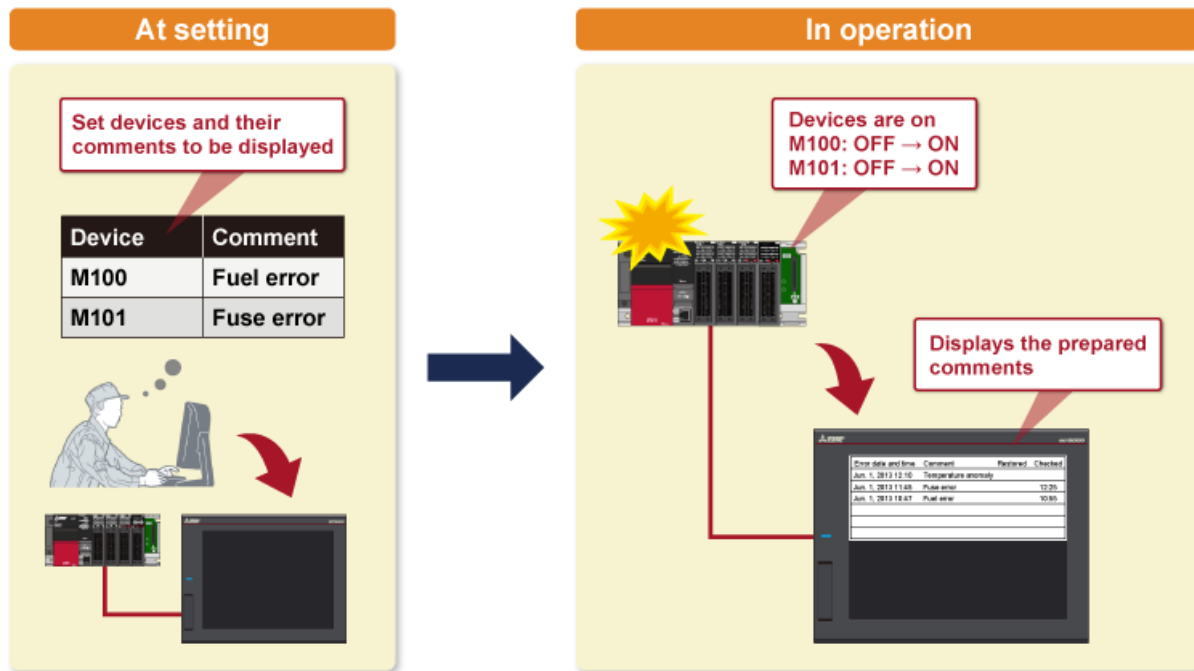
An alarm occurred

A screenshot of a GOT (Graphic Operator Terminal) screen. The screen displays a table of alarm information. The table has four columns: 'Error date and time', 'Comment', 'Restored', and 'Checked'. The data rows show three entries: 'Jun. 1, 2013 12:10' with 'Temperature anomaly', 'Jun. 1, 2013 11:45' with 'Fuse error' (restored at 12:25), and 'Jun. 1, 2013 10:47' with 'Fuel error' (checked at 10:55).

Error date and time	Comment	Restored	Checked
Jun. 1, 2013 12:10	Temperature anomaly		
Jun. 1, 2013 11:45	Fuse error	12:25	
Jun. 1, 2013 10:47	Fuel error		10:55

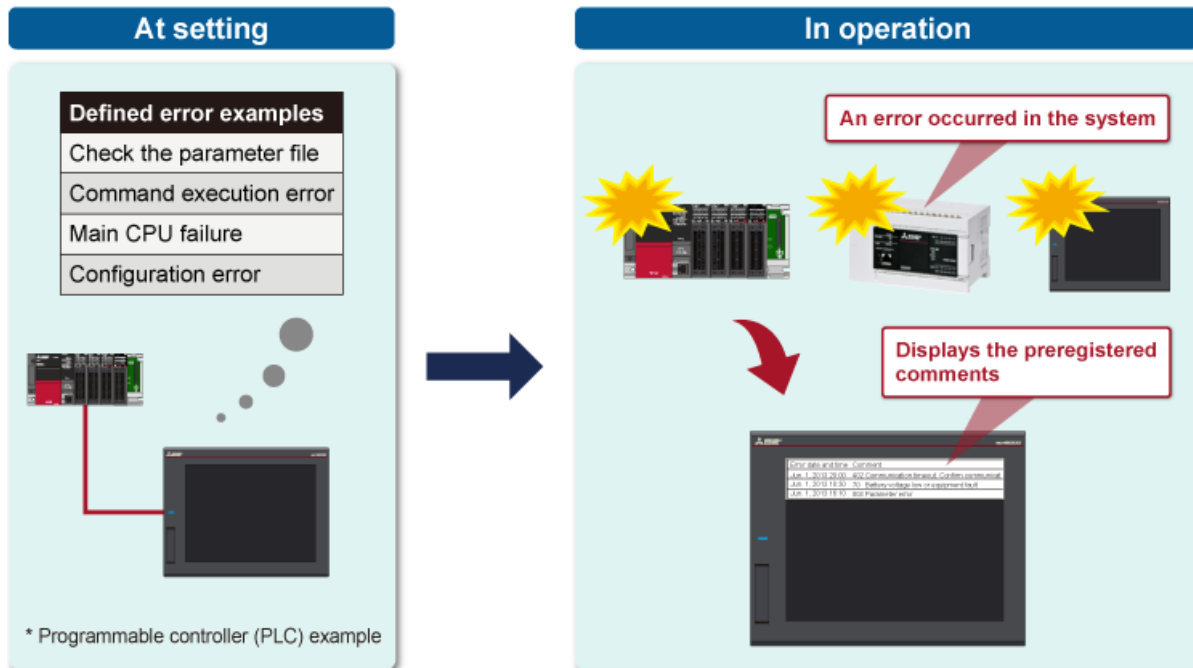
The user alarm display is a function that displays user-prepared comments when user-defined alarms occur.

<User alarm display>



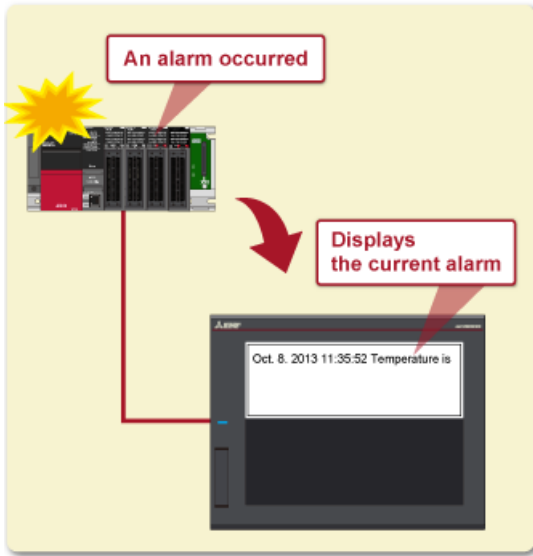
The system alarm display is a function that displays the comments preregistered in the GOT when alarms defined by the system of the GOT, controller, network, or others occur.

<System alarm display>

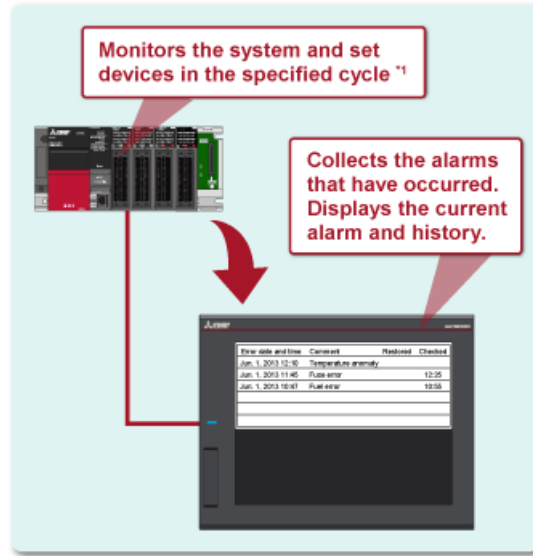


There are two ways to display the user alarm display and the system alarm display. One is to display the currently occurring alarms only, and the other is to display the currently occurring alarms and the alarm history as well.

<Current alarm only>



<Current alarm and history>

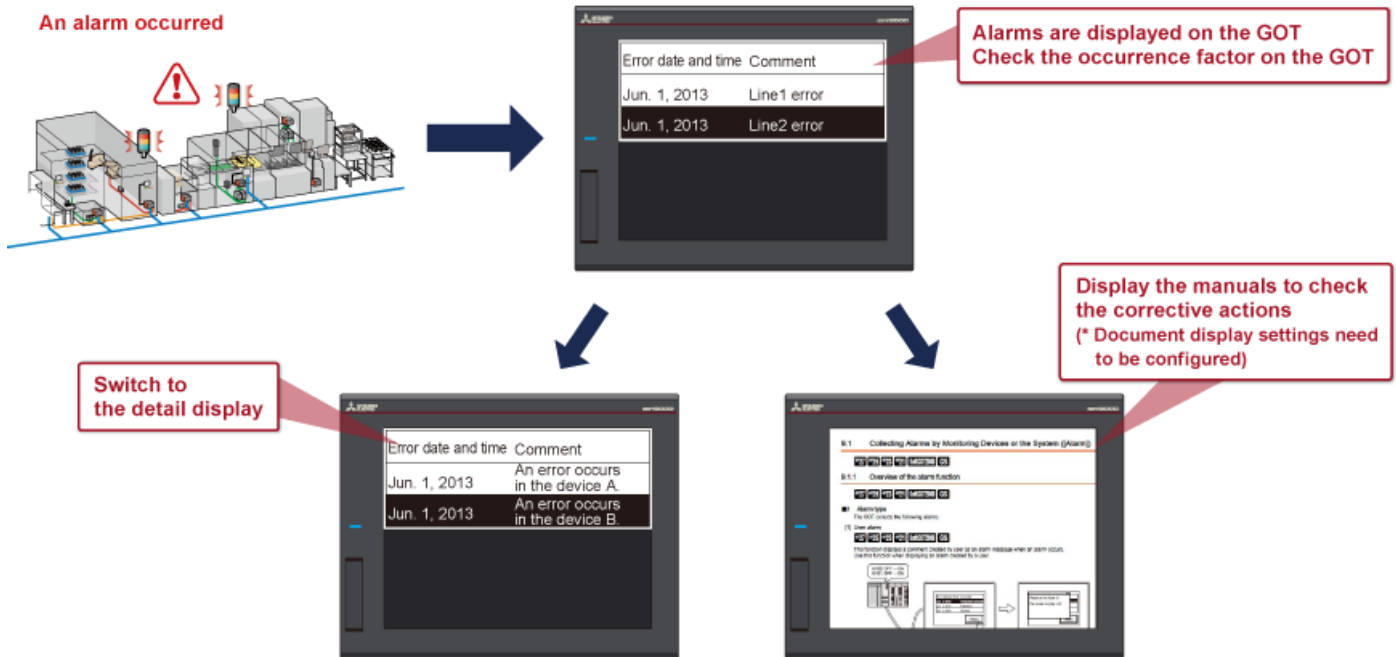


*1 Some errors are not monitored in cycles and other errors are monitored in fixed cycles.

The alarm display enables various things. The following shows three useful things enabled by the alarm display.

1) Checking the occurrence factor

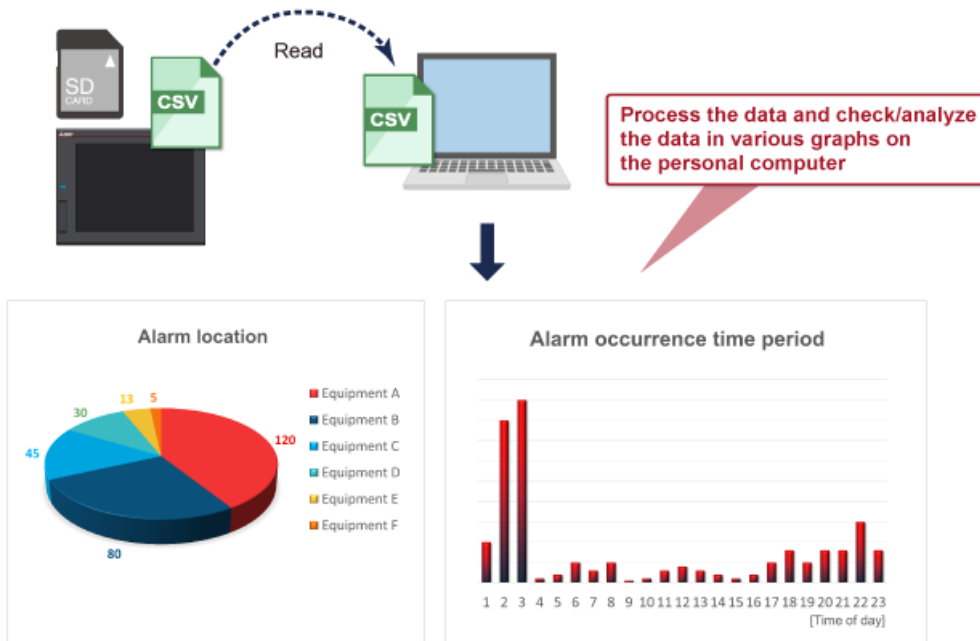
The alarm details can be displayed on the GOT, enabling you to check the occurrence factor easily.



2) Analyzing the alarm for improvement

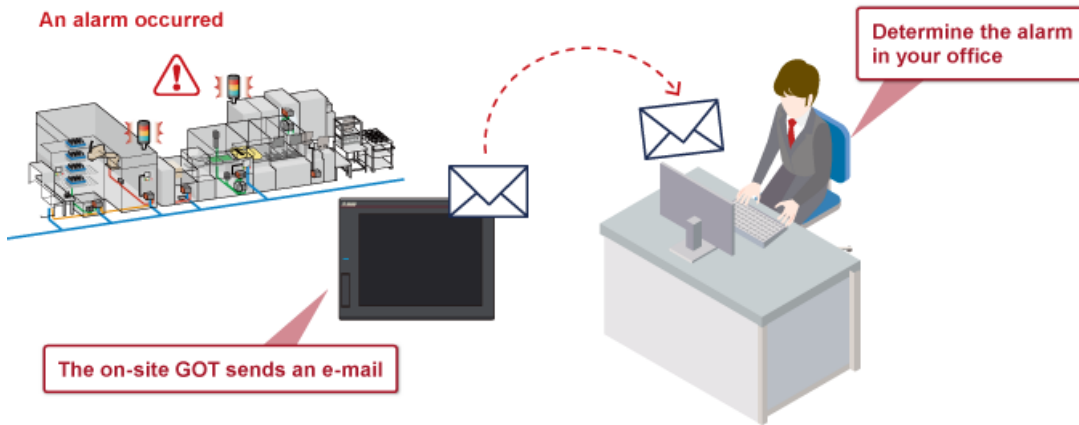
The alarms that have occurred can be stored as log data. The data can be converted to a CSV file and analyzed on a personal computer.

Analyzing the alarm log data in a graph or table can visualize the alarm-ridden locations and alarm-prone time periods, which helps improve the situation.



3) Notifying an alarm by sending an e-mail from the GOT

When an alarm occurs, the details can be sent by an e-mail from the GOT. If you specify an office personal computer or others for the mail destination, you can determine the alarm occurrence status even when you are not on site.



In this chapter, we will learn various alarm display types.

2.1 Alarm display types

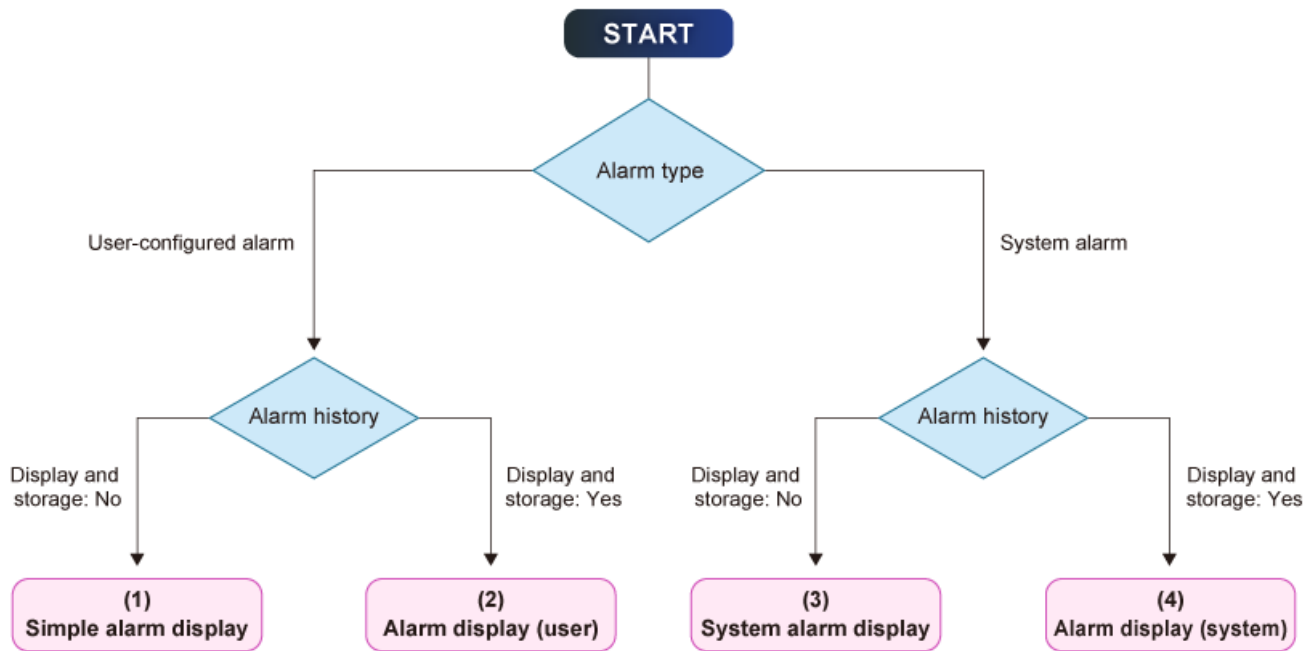
2.2 Simple alarm display

2.3 Alarm display (user)

2.4 System alarm display

2.5 Alarm display (system)

We have learned that there are two alarm display types: one is user alarms, and the other is system alarms. The two types can further be divided into four types according to the conditions such as whether or not the alarm history can be stored.

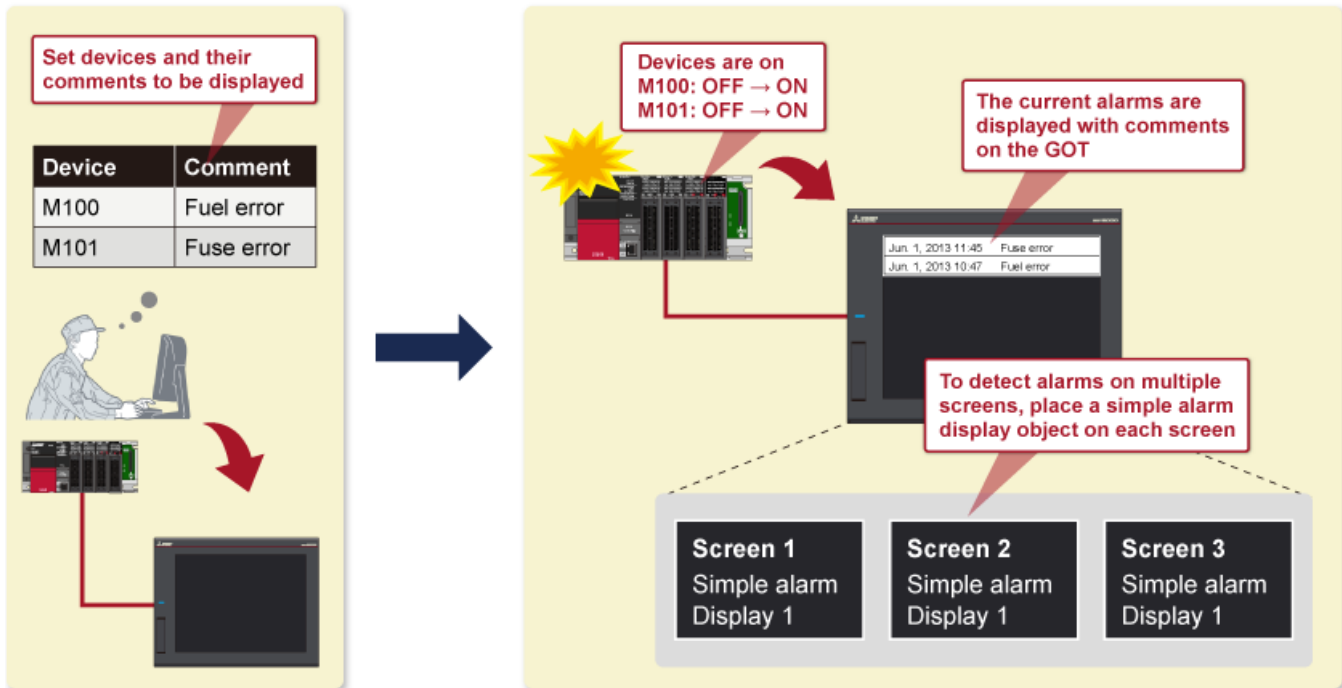


The following table shows the differences among alarm display types.

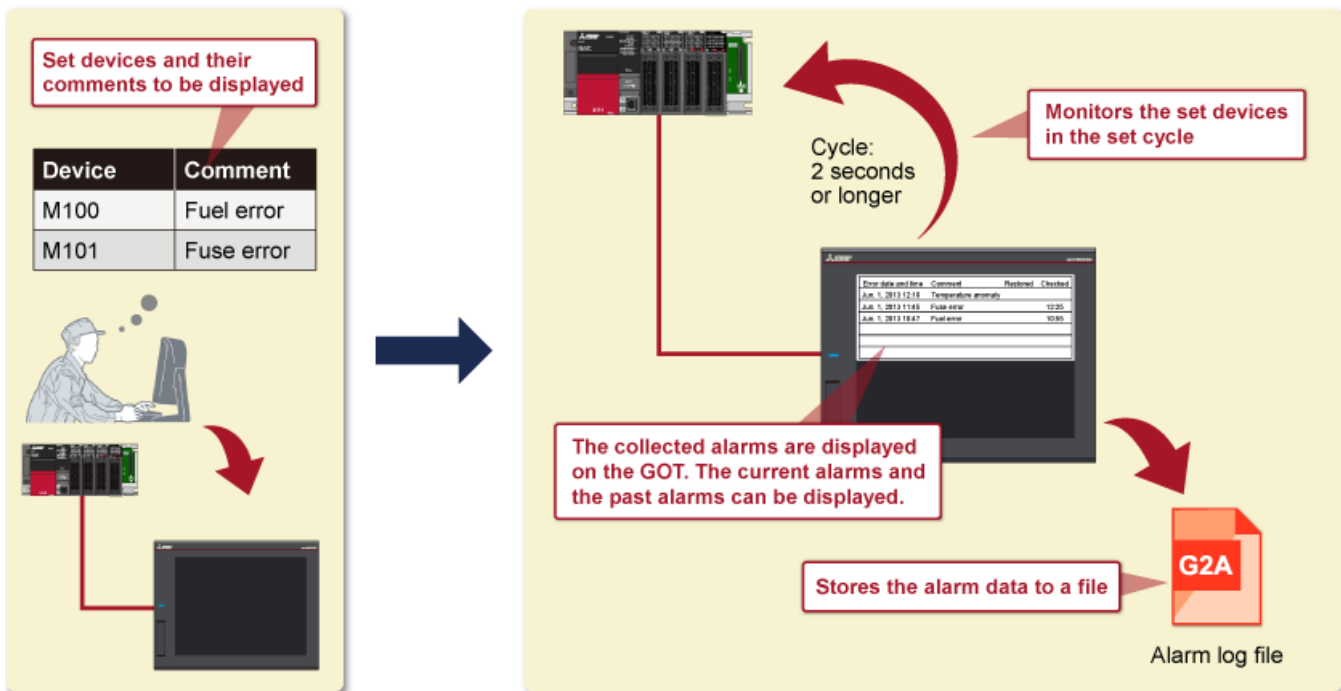
O: Supported, x: Not supported

Item	Simple alarm display	Alarm display (user)	System alarm display	Alarm display (system)
Displayed alarm type	User-configured alarm	User-configured alarm	System-defined alarm	System-defined alarm
Current alarm display	O	O	O	O
Past alarm display (history display)	x	O	x	O
Alarm storage	x	O	x	O
Message font change	x (Standard font only)	O (Outline font selectable)	x (Standard font only)	O (Outline font selectable)

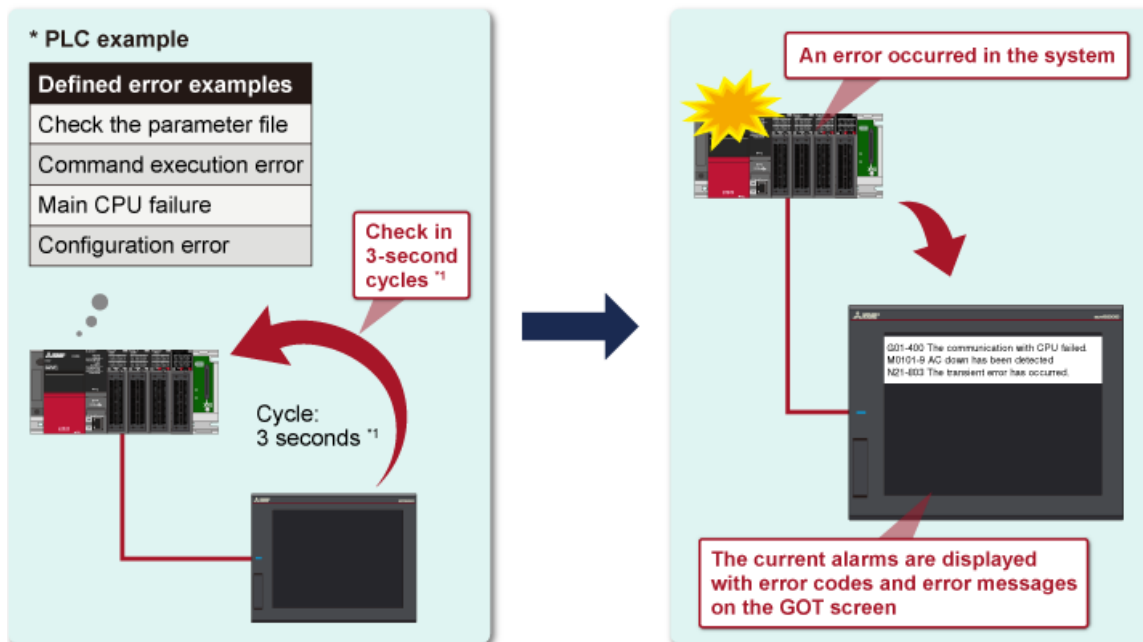
A simple alarm display object displays the user-configured alarms only while the alarms are occurring. The alarms are detected only when the screen with a simple alarm object is displayed.



Set target devices for alarm display. The alarm display (user) object collects alarms of the set devices by monitoring them. The object displays the collected alarms (currently occurring alarms and past alarms).

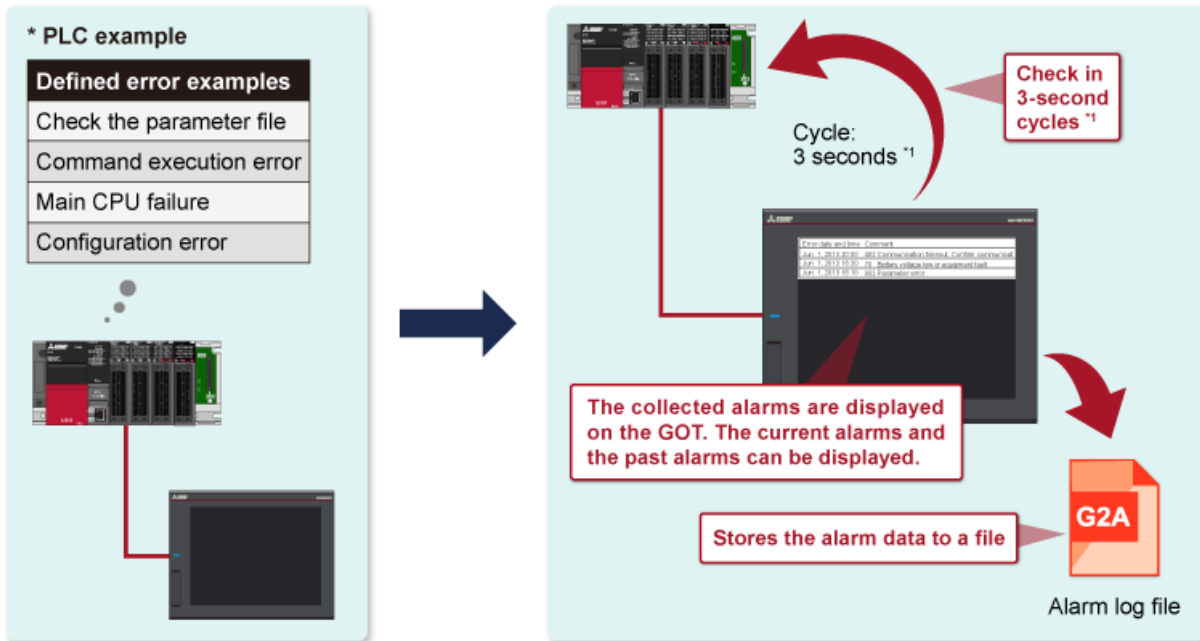


A system alarm display object displays the comments prepared in the system on the GOT when alarms occur. The object monitors the GOT, controller, and network and displays the codes and messages of the errors when they occur.



*1 GOT errors are displayed at occurrence, not in cycles.

An alarm display (system) object collects alarms by monitoring the GOT, controller, and network. The object displays the collected alarms (currently occurring alarms and past alarms).



*1 GOT errors are displayed at occurrence, not in cycles.

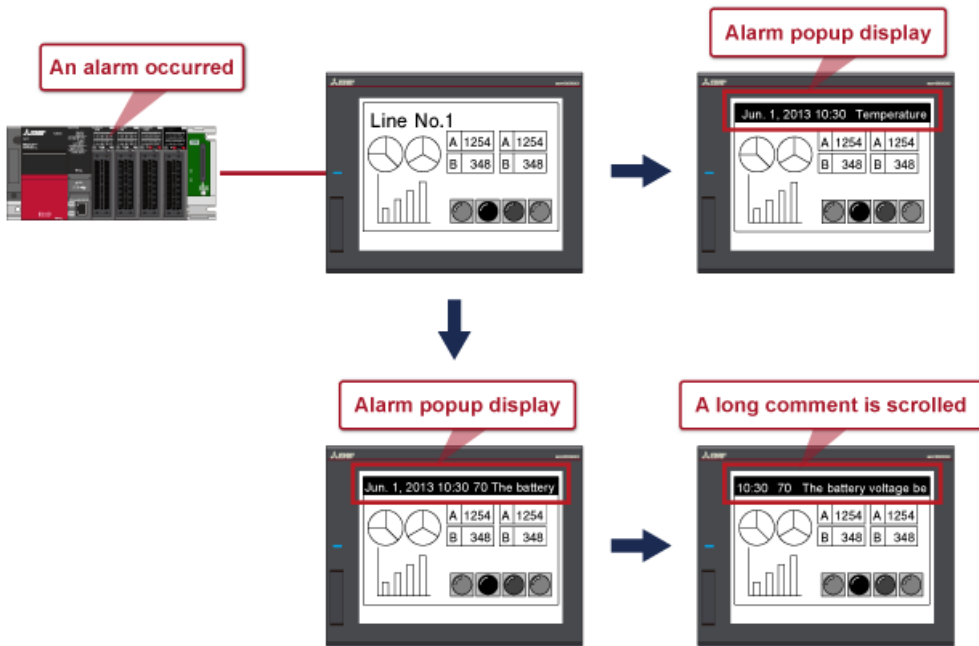
We will learn the advanced functions of the alarm display.

3.1 Alarm popup display

3.2 Hierarchical display

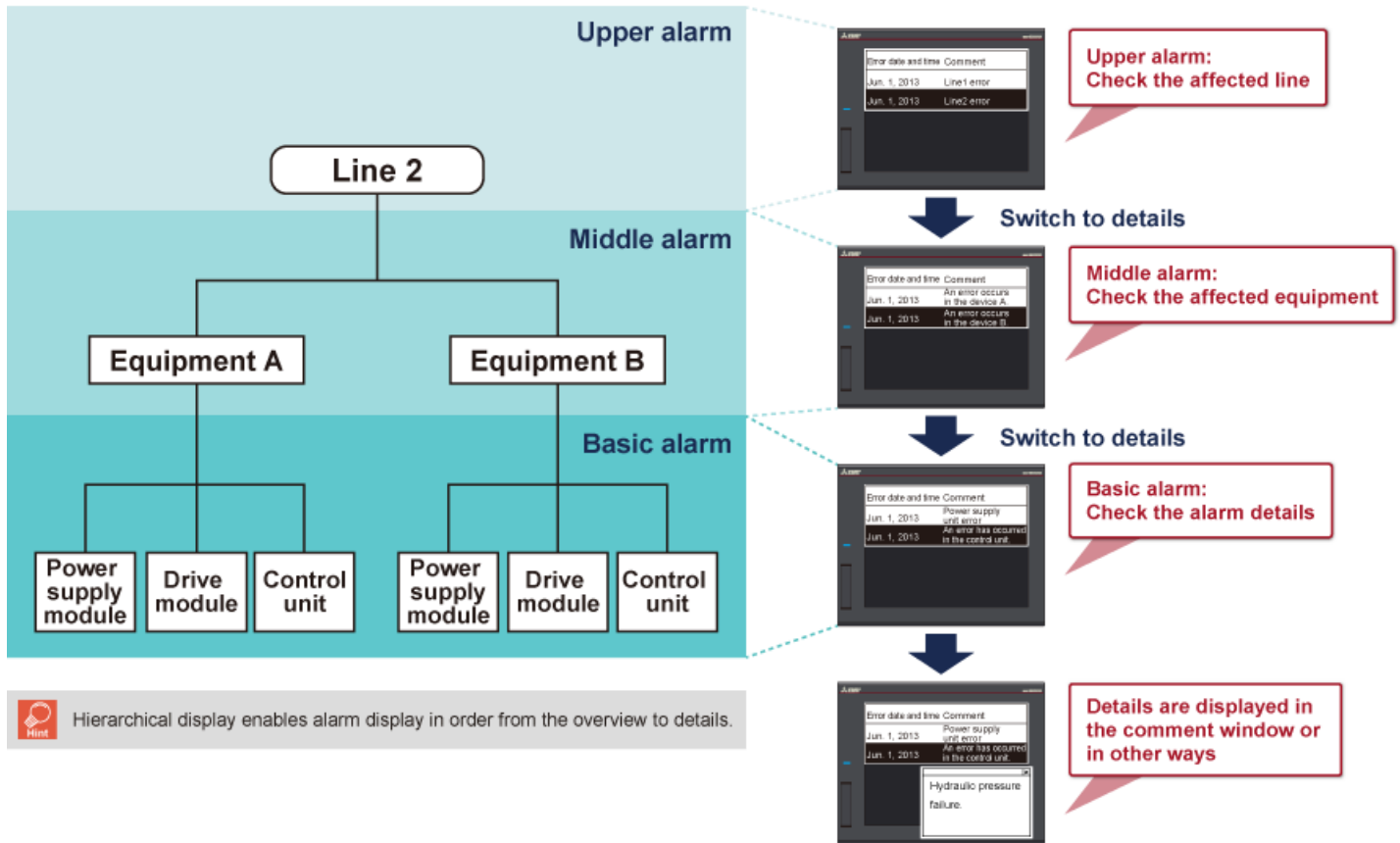
3.3 Mail send function

You can configure the settings to pop up alarms even on a screen without an alarm display object. Pop-up comments can be scrolled across the screen from right to left; therefore, even a long comment can be completely displayed.



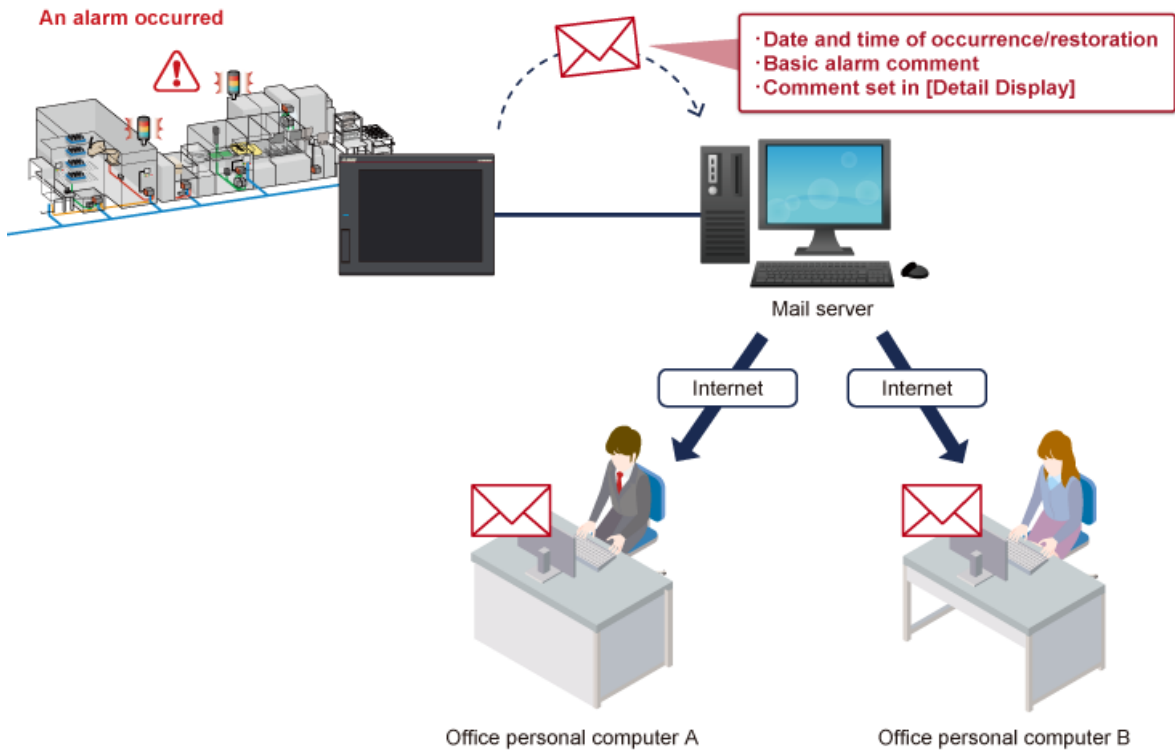
An alarm is displayed by a single line.

The user alarm function displays the comment for one alarm separately in the upper alarm comment, middle alarm comment, or basic alarm comment. In the basic alarm, the detailed information such as the cause of the alarm and corrective actions can be displayed in the comment window, the base screen, and the window screen.



Hierarchical display enables alarm display in order from the overview to details.

This function sends an e-mail from the GOT using the alarm display function at alarm occurrence and at alarm reset. *1
An e-mail can include information such as the date and time of occurrence/reset, the basic alarm comment, and the comment set in [Detail Display].



*1 The mail send function is only available for GT27 and GT25 models.

This is the end of the Alarm Display (Introduction) course.
Finally, let's summarize what we have learned in this course.

Chapter 1 Overview of the Alarm Display	<ul style="list-style-type: none">• What is the alarm display?• Things we can do with the alarm display
Chapter 2 Various Alarm Display Types	<ul style="list-style-type: none">• Alarm display types• Simple alarm display• Alarm display (user)• System alarm display• Alarm display (system)
Chapter 3 Advanced Functions of the Alarm Display	<ul style="list-style-type: none">• Alarm popup display• Hierarchical display• Mail send function

You can learn how to display and store alarms in another e-learning course, **Alarm Display (Display and Storage)**.
For your next step, we recommend the "Alarm Display (Display and Storage)" course.

Now that you have completed all of the lessons of the **Alarm Display (Introduction)** course, you are ready to take the final test. If you are unclear on any of the topics covered, please take this opportunity to review those topics.

There are a total of 3 questions (5 items) in this Final Test.

You can take the final test as many times as you like.

Score results

The number of correct answers, the number of questions, the percentage of correct answers, and the pass/fail result will appear on the score page.

		1	2	3	4	5	6	7	8	9	10	
Retry	Final Test 1	✓	✓	✓	✗							Total questions: 28
	Final Test 2	✓	✓	✓	✓							Correct answers: 23
	Final Test 3	✓										Percentage: 82 %
	Final Test 4	✓	✓									
	Final Test 5	✓	✓									
Retry	Final Test 6	✓	✗	✗	✗							
	Final Test 7	✓	✓	✓	✓							
	Final Test 8	✓	✓	✓	✓	✓						
	Final Test 9	✓	✓	✓	✓							
Retry	Final Test 10	✗										

To pass the test, **60%** of correct answers is required.

Complete the following sentence.

There are two alarm display function types: one is a function that displays user-configured alarms, and the other is a function that displays system alarms.

The user-configured alarms are called the [Q1] alarm and the system alarms are called the [Q2] alarm.

Q1

User



Q2

System



Complete the following sentence.

It is possible to send an e-mail from the GOT using the alarm display function at alarm [Q1] and at alarm reset.

Q1

Occurrence



Complete the following sentence.

Various alarm display types are available for GOT2000. [Q1] object and [Q2] object can display the alarm history.

Q1

Alarm display (user)



Q2

Alarm display (system)



You have completed the Final Test. Your results are as follows.
To end the Final Test, proceed to the next page

	1	2	3	4	5	6	7	8	9	10
Final Test 1	✓	✓								
Final Test 2	✓									
Final Test 3	✓	✓								

Total questions: **5**

Correct answers: **5**

Percentage: **100 %**

Clear

You have completed the **Alarm Display (Introduction) course.**

Thank you for taking this course.

We hope you enjoyed the lessons and the information you acquired in this course will be useful in the future.

You can review the course as many times as you want.

Review

Close